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Patent  
Attorney's Docket No. 005950-834

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
Dahl, et al.	)	Group Art Unit: 1764
Application No.: 10/621,956	)	Examiner: Unassigned
Filed: July 16, 2003	)	Confirmation No.: 2018
For: Optical Uses of Diamondoid-Containing Materials	)	

**INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ [X] No additional fee for submission of an IDS is required.
- ☐ [ ] The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ [ ] A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ [ ] A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ [ ] Charge \$\_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ [ ] A check in the amount of \$\_\_\_\_\_ is enclosed for the fee due.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: July 14, 2004

By: Stephen F. Powell  
Stephen F. Powell  
Registration No. 43,014

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(650) 622-2300



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**FIRST**  
**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed. However, copies of the listed U.S. patents and U.S. patent application publications are not enclosed since it is no longer required according to the July 11, 2003 wavier of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later. Since the documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b) no fee or statement is required.

First Information Disclosure Statement

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To assist the Examiner, the listed on the attached form PTO-1449. It is respectfully requested that an Examiner-initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: July 14, 2004

By: Stephen F. Powell

Stephen F. Powell  
Registration No. 43,014  
Redwood Shores Office  
650-622-2300

P.O. Box 1404  
Alexandria, Virginia 22313-1404



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U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
	6,376,276	B1	Oishi et al.	04-23-2002
	6,352,884	B1	Yu et al.	03-05-2002
	6,340,393	B1	Yoshida	01-22-2002
	6,274,837	B1	Windischmann et al.	08-14-2001
	6,235,851		Ishii, et al.	05-22-2001
	6,162,412		Fujimori et al.	12-19-2000
	6,110,276		Yu et al.	08-29-2000
	5,792,256		Kuchеров et al.	08-11-1998
	5,747,118		Bunshah et al.	05-05-1998
	5,656,828		Zachai et al.	08-12-1997
	5,653,800		Kuchеров et al.	08-05-1997
	5,632,812		Hirabayashi	05-27-1997
	5,600,156		Nishibayashi et al.	02-04-1997
	5,541,423		Hirabayashi	07-30-1996
	5,531,184		Muranaka et al.	07-02-1996
	5,504,323		Heeger et al.	04-02-1996
	5,478,650		Davanloo et al.	12-26-1995
	5,476,812		Kimoto et al.	12-19-1995
	5,470,505		Smith et al.	11-28-1995
	5,454,880		Sariciftci et al.	10-03-1995
	5,449,531		Zhu et al.	09-12-1995
	5,414,189		Chen, et al.	05-09-1995
	5,389,799		Uemoto	02-14-1995
	5,382,684		Moini et al.	01-17-1995
	5,382,809		Nishibayashi et al.	01-17-1995
	5,371,382		Venkatesan et al.	12-06-1994
	5,352,908		Kobashi et al.	10-04-1994
	5,349,209		Moyer et al.	09-20-1994
	5,331,183		Sariciftci et al.	07-19-1994
	5,306,928		Kimoto et al.	04-26-1994
	5,223,721		Iida et al.	06-29-1993
	5,210,431		Kimoto et al.	05-11-1993
	5,171,632		Heeger et al.	12-15-1992
	5,144,380		Kimoto et al.	09-01-1992
	5,132,749		Nishibayashi et al.	06-21-1992
	5,117,267		Kimoto et al.	05-26-1992
	5,112,775		Iida et al.	05-12-1992
	5,075,757		Ishii et al.	12-24-1991
	5,051,785		Beetz, Jr. et al.	09-24-1991
	5,019,660		Chapman et al.	05-28-1991
	5,017,734		Baum et al.	05-21-1991
	3,832,332		Thompson	08-27-1974
	3,457,318		Capaldi et al.	07-22-1969

Substitute for forms 1449A/PTO & 1449B/PTO	ATTORNEY'S DKT NO.	APPLICATION NO.
	005950-834	10/621,956
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	July 16, 2003	1764

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation Yes	No
	2,545,292	A	DE	04-1979		
	WO 02/00505	A2	WO	01-17-2002		
	WO 03/05066	A1	WO	06-19-2003		
	WO 02/057201	A2	WO	07-25-2002		
	WO 02/058139	A2	WO	07-25-2002		
	WO 95/06019	A1	WO	03-02-1995		

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	U.S. Patent Application Serial No. 10/046,486 filed January 16, 2002.
	Askeland, D.R., "Electrical Conductivity", Chapter 17, pp 664-667, <i>The Science and Engineering of Materials</i> Second Edition, J. Donald Childress ed. (1989)
	Balaban et al., "Systematic Classification and Nomenclature of Diamond Hydrocarbons -I, <i>Tetrahedron</i> 34:3599-3606 (1978).
	Baugman, G.I., "Dibromination of Adamantane", (1964).
	Becker et al, "A Short Synthese of 1-azaadamantan-4-one and the 4r and 4s Isomers of 4-Amino-1-azaadamantane", <i>Synthesis</i> 11:1080-1082 (1992).
	Bingham, R.C. et al., Chapter 18 of "Chemistry of Adamantanes", <i>Springer-Verlag</i> (1971).
	Bishop, R., et al., "Detection of Non-Conjugative Interactions in Rigid Cyclic Molecules by Using Carbon-13 N.M.R. Shift Values", <i>Aust. J. Chem.</i> 40:249-255 (1987).
	Black, R.M. et al., "Adamantane Chemistry. Part 3. Abnormal Hypiodite Reactions of 2-Substituted Adamantan-2-ols; Synthetic Routes to 4-Oxahomo- and 2-Oxa-adamantanes, and 7-Substituted-bicyclo[3.3.1]nona-3-ols", <i>J. Chem. Soc. Perkins Trans. I</i> 410-418 (1980).
	Blaney et al, "Chemistry of Diamantane, Part II. Synthesis of 3,5-disubstituted Derivatives", <i>Synthetic Communications</i> 3(6):435-439 (1973).
	Boudjouk et al, "Synthesis and Reactivity of 1-Silaadamantyl Systems", <i>Journal of Organometallic Chemistry</i> 2:336-343 (1983).
	Boudjouk et al, "The Reaction of Magnesium with cis-1,3,5-Tris(bromomethyl)cyclohexane. Evidence For a Soluble Tri-grignard", <i>Journal of Organometallic Chemistry</i> 281:C21-C23 (1985).
	Bubnov et al, "A Novel Method of Synthesis of 1-azaadamantane from 1-boraadamantane", <i>Journal of Organometallic Chemistry</i> 412:1-8 (1991).
	Canham, L., "Gaining Light from Silicon", <i>Nature</i> 408:411-412 (2000).
	Cao, G.Z., "Nitrogen and Phosphorus Doping in CVD Diamond", <i>Diamond</i> , edited by M.H. Nazare and A.J. Neves, INSPEC pp. 345-347 (2001).
	Chakrabarti et al., "Chemistry of Adamantane. Part II. Synthesis of 1-Adamantyloxyalkylamines", <i>Tetrahedron Letters</i> 60:6249-6252 (1968).
	"Computation Concepts" <i>Chem3D Molecular Modeling and Analysis User's Guide</i> , Chapter 9, pages 123-144.
	Courtney, T., Johnston, D.E. McKervey, M.A. and Rooney, J.J., "The Chemistry of Diamantanes. Part 1. synthesis and Some Functionalisation Reactions", <i>J. Chem. Soc. Perkin I</i> 2691-2696 (1972).
	Eguchi et al, "A Novel Route to the 2-Aza-adamantyl System via Photochemical Ring Contraction of Epoxy 4-Azahomoadamantanes", <i>Journal of Organometallic Chemistry, Commun.</i> , 1147-1148 (1984).
	Fernandez, M.J., et al., "NMR Study of 1-Azatricyclo[3.3.1 <sup>3-7</sup> ]decane Derivatives", <i>J. Heterocyclic Chem.</i> 26:307-312 (1989).

Substitute for forms 1449A/PTO & 1449B/PTO	ATTORNEY'S DKT NO. 005950-834	APPLICATION NO. 10/621,956
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	Fernandez, M.J., et al., "Synthesis, Structural and Conformational Study of 4- $\alpha$ -(or $\beta$ )-p-Chlorobenzoyloxy-1-azaadamantane Hydrochloride", <i>J. Heterocyclic Chem.</i> <b>26</b> :349-353 (1989).
	Fleming, I., et al., "A New Oxindole Synthesis", <i>J. Chem. Soc. Perkin Trans.</i> <b>1</b> :617-626 (1991).
	Fort, Jr., et al., "Stereochemistry of Hydride Reductions of 4,8-Dihalo-2-thiaadamantanes and Related Thiabicyclo[3.3.1]nonanes", <i>J. Org. Chem.</i> <b>52</b> :2396-2399 (1987).
	Fox, M.A., et al., "Transmission of Electronic Effects by Icosahedral Carboranes; Skeletal Carbon-13 Chemical Shifts and Ultraviolet-Visible Spectra of Substituted aryl-p-carboranes (1,12-dicarba-closo-dodecaboranes)", <i>J. Chem. Soc., Dalton Trans.</i> 401-411 (1998).
	Fritz, G., et al., "Silicon-Carbon Compounds with a Carborundum Structure", Abstract, <i>Angew. Chem., Internat. Edit.</i> <b>9</b> (6) (1970).
	Fritz, G., et al., "Über die Isolierung Hoherer Carbosilane aus der Pyrolyse des Tetramethylsilans", <i>Z. anorg. allg. Chem.</i> <b>512</b> pps. 103-125 (1984).
	Gagneux et al., "1-Substituted 2-Heteroadamantanes", <i>Tetrahedron Letters</i> <b>17</b> : 1365-1368 (1969).
	Gerzon, et al., "The Adamantyl Group in Medicinal Agents, 1. Hypoglycemic N-Arylsulfonyl-N-adamantylureas", <i>Journal of Medicinal Chemistry</i> <b>6</b> (6):760-763 (1963).
	Hass, et al., Adamantoxycarbonyl, a New Blocking Group. Preparation of 1-Adamantyl Chloroformate", <i>Journal of the American Chemical Society</i> <b>88</b> (9):1988-1992 (1966).
	Hahn, J.M. et al., "Strongly Enhanced Stereoselectivity in the Reduction of 5-Substituted Adamantanones by Substitution of C <sub>5</sub> by Positive Nitrogen", <i>J. Am. Chem. Soc.</i> <b>114</b> :1916-1917 (1992).
	Hawley, "Condensed Chemical Dictionary", 14th ed., John Wiley & Sons, Inc., 2001.
	Heavens, O.S., "Wave Theory (1): Interference", pp 28-48 from <i>Insight into Optics</i> , John Wiley & Sons, (1991).
	Heavens, O.S., "Interaction of Radiation and Matter", pp 137-145 from <i>Insight into Optics</i> , John Wiley & Sons, (1991).
	Heavens, O.S., "Lasers", pp 244-259 from <i>Insight into Optics</i> , John Wiley & Sons, (1991).
	Hecht, E., "Lasers and Laserlight", pp 577-593 from <i>Optics</i> , Addison-Wesley Publishing Company, (1987).
	Henkel et al, "Neighboring Group Effects in the $\beta$ -halo Amines. Synthesis and Solvolytic Reactivity of the anti-4-Substituted 2-Azaadamantyl System", <i>Journal of Organometallic Chemistry</i> <b>46</b> :4953-4959 (1981).
	Jackman, R.B., "Diamond Optoelectronic Devices", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 393-398 (2001).
	Jawdosiuk, M., et al., "Photolysis and Thermolysis of 3-Azidonoradamantane. "Anti-Bredt" Imines, 2-aza-adamant-1-ene, and 4-Azaprotadamant-3-ene", <i>J. Chem. Soc. Perkin Trans</i> <b>1</b> :2583-2585 (1984).
	Jones, R., et al., "Theory of Aggregation of Nitrogen in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 127-129 (2001).
	John, P., "Toward Diamond Lasers", <i>Science</i> <b>292</b> :1847-1848 (2001).
	Johnston, C., et al., "Boron Doping and Characterisation of Diamond", <i>Diamond</i> , edited by M.H. Nazare and A.J. Neves, INSPEC pp. 337-344 (2001).
	Kalish, R., et al., "Doping of Diamond Using Ion Implantation", <i>Diamond</i> , edited by M.H. Nazare and A.J. Neves, INSPEC pp 321-330 (2001).
	Kano, K., "Optoelectronics", pp 428-464 from <i>Semiconductor Devices</i> , Prentice Hall, New Jersey.
	Kiflawi, I., et al, "Aggregates of Nitrogen in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 130-133 (2001).

Substitute for forms 1449A/PTO & 1449B/PTO	ATTORNEY'S DKT NO.	APPLICATION NO.
	005950-834	10/621,956
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NON PATENT LITERATURE DOCUMENTS	
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	Kiflawi, I., et al, "The Nitrogen Interstitial in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 134-135 (2001).
	Koizumi, S., et al., "Ultraviolet Emission from a Diamond pn Junction", <i>Science</i> <b>292</b> :1988-1990 (2001)
	Krasutsky, P.A., et al., "A New One-Step Method for Oxaadamantane Synthesis", <i>Tetrahedron Letters</i> <b>37</b> (32):5673-5674 (1996).
	Krasutsky, P.A., et al., "Observation of a Stable Carbocation in a Consecutive Criegee Rearrangement with Trifluoroacetic Acid", <i>J. Org. Chem.</i> <b>65</b> :3926-3933 (2000).
	Krishnamurthy et al, "Heteroadamantanes. 2. Synthesis of 3-Heterodiamantanes", <i>Journal of Organometallic Chemistry</i> , <b>46</b> (7):1389-1390 (1981).
	Kroschwitz, J.I., ed, "Electrically Conductive Polymers" pp 174-219 from <i>High Performance Polymers and Composites</i> , John Wiley & Sons (1991)
	Kurtsiefer, C., et al., "Stable Solid-State Source of single Photons", <i>Physical Review Letters</i> <b>85</b> (2):290-293 (2000).
	Lansbury, et al., "Some Reactions of $\alpha$ -Metalated Ethers", <i>The Journal of Organic Chemistry</i> <b>27</b> (6):1933-1939 (1962).
	Lawson, S.C., et al., "The effect of Transition Metals (TM) on the Aggregation Kinetics of Nitrogen in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 172-173 (2001).
	Liaw, D.J, et al., "Synthesis and Characterization of New Polyamides and Polyimides Prepared from 2,2-bis[4-(4-aminophenoxy)phenyl]adamantane", <i>Macromol. Chem. Phys.</i> <b>200</b> (6):1326-1332 (1999).
	Lin, et al., "Natural Occurrence of Tetramantane (C <sub>22</sub> H <sub>18</sub> ), Pentamantane (C <sub>26</sub> H <sub>20</sub> ) and Hexamantane (C <sub>30</sub> H <sub>22</sub> ) in a Deep Petroleum Reservoir", <i>Fuel</i> <b>74</b> (10):1512-1521 (1995).
	Lippert, E., et al., "Darstellung und UV-Spektren einiger Fluorenon-Derivate", <i>Angew. Chem.</i> <b>71</b> :429-430 (1959).
	Makarova, et al., "Psychotropic Activity of Some Aminoketones Belonging to the Adamantane Group" <i>Pharmaceutical Chemistry Journal</i> <b>34</b> :6 (2000).
	Marchand, A.P., "Diamondoid Hydrocarbons - Delving into Nature's Bounty", <i>Science</i> <b>299</b> , 52-52 (2003).
	Marchand, A.P., "Polycyclic Cage Compounds: Reagents, Substrates, and Materials for the 21 <sup>st</sup> Century", <i>Aldrichimica Acta</i> <b>28</b> (4):95-104 (1995).
	Marshall et al., "N-Arylsulfonyl-N-alkylureas", <i>Journal of Organic Chemistry</i> <b>23</b> :927-929 (1958).
	Marshall et al., "Further studies on N-Arylsulfonyl-N-alkylureas", <i>Journal of Medicinal Chemistry</i> <b>6</b> :60-63 (1963).
	McKervey, et al., "Synthetic Approaches to Large Diamondoid Hydrocarbons", <i>Tetrahedron</i> <b>36</b> :9710992 (1980)
	Meeuwissen et al, "Synthesis of 1-Phosphaadamantane", <i>Tetrahedron Letters</i> , <b>39</b> (24):4225-4228 (1983).
	Mikhailov, B.M., et al., "Organoboron Compounds", <i>J. Organometallic Chemistry</i> <b>250</b> :23-31 (1983).
	Moiseev, I.K., et al., "Reactions of Adamantanes in Electrophilic Media", <i>Russian Chem. Reviews</i> <b>68</b> (12):1001-1020 (1999).
	Mochizuki, Y, et al., "Polarizability of Silicon Clusters", <i>Chemical Physics Letters</i> <b>336</b> , 451-456 (2001).
	Mukherjee, A.K., et al., "On the Stereochemistry of the Oxidation of 5-Phenyl-2-thiaadamantane", <i>J. Org. Chem.</i> <b>58</b> :7955-7957 (1993).
	Newton, M.E., "Neutral ([N <sub>8</sub> ] <sup>0</sup> ) and Ionised ([N <sub>8</sub> ] <sup>+</sup> ) Single Substitutional Nitrogen in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 136-141 (2001).

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	Neves, A.J., et al., "Optical and EPR Properties of Transition Metals in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 167-171(2001).
	Nordlander et al., "Solvolysis of 1-Adamantylcarbiny and 3-Homoadamantyl Derivatives. Mechanism of the Neopentyl Cation Rearrangement", <i>Journal of the American Chemical Society</i> <b>88</b> :19 (1966).
	Okoroanyanwu, U. et al., "Alicyclic Polymers for 193 nm Resist Applications: Lithographic Evaluation", <i>Chem. Mater.</i> <b>10</b> :3329-3333 (1998).
	Park, S., et al., "endo-Fullerene and Doped Diamond Nanocrystallite-Based Models of Qubits for Solid-State Quantum Computers", <i>J. Nanoscience and Nanotechnology</i> <b>1</b> (1):75-81 (2001).
	Pasini, D., et al. <i>Advanced Materials</i> <b>12</b> :347-351 (2000).
	Pate, B.B., "The Diamond Surface: Atomic and Electronic Structure", <i>Surface Science</i> <b>165</b> :83-142 (1986).
	Pavesi, L., et al., "Optical Gain in Silicon Nanocrystals", <i>Nature</i> <b>408</b> :440-444 (2000)
	Pereira, E., "Photoconductivity in Diamond", edited by M.H. Nazare and A.J. Neves, INSPEC pp. 243-244 (2001).
	Prins, J.F., "Large Dopants in Diamond", <i>Diamond</i> , edited by M.H. Nazare and A.J. Neves, INSPEC pp 331-336 (2001).
	Radziszewski, J.G., et al., "2-Azaadamant-1-ene and 4-Azaprotadamant-3-ene", <i>J. Am. Chem.</i> <b>106</b> :7996-7998 (1984).
	Ramdas, A.K., "A1.2 Modifications to <sup>12</sup> C-diamond by the <sup>13</sup> C-isotope: Raman, Brillouin and Infrared Spectroscopy of Phonons", <i>INSPEC</i> , Properties, Growth and Applications of Diamondoids (2001).
	Ramdas, A.K., "A1.3 Electronic Excitations in Isotopically Controlled Diamonds: Infrared and Raman Spectroscopy of Acceptor-Bound Holes", <i>INSPEC</i> , Properties, Growth and Applications of Diamondoids (2001).
	Reinhardt, "Biadamantane and some of its Derivatives", <i>Journal of Organic Chemistry</i> <b>27</b> :3258-3261 (1962).
	Risch, N., et al., "Triple (Grob) Fragmentation. Retro-Mannish Reactions of 1-Aza-Adamantane Derivatives", <i>Tetrahedron Letters</i> <b>32</b> (35):4465-4468 (1991).
	Risch, N., et al., "Unusual Reorganization Reactions of 3-Azabicyclo[3.3.1]nonanes", <i>J. Am. Chem. Soc.</i> <b>113</b> :9411-9412 (1991).
	Roberts, P.J., et al., "anti-Tetramantane, a Large Diamondoid Fragment", <i>Acta. Cryst.</i> <b>B33</b> :2335-2337 (1977).
	Sasaki, T. et al., "New Highly Strained Bridgehead Imines, 2-Azaadamant-1-ene and 4-Azaprotadamant-3-ene", <i>Tetrahedron Letters</i> <b>23</b> (47):4969-4972 (1982).
	Sasaki, T., et al., "Synthesis and Acidolysis of 3-endo-Azidomethyl- and 3-endo-Azido-bicyclo[3.3.1]non-6-enes. A Novel Synthesis of 4-Azahomoadamant-4-enes", <i>J. Chem. Soc. Perkin Trans I</i> 2529-2534 (1983).
	Saski, T., et al., "Synthesis of Adamantane Derivatives. 42. Novel Synthesis of 5-Methylene-4-azahomoadamantane Derivatives from 2-Methyl-2-hydroxyadamantane and Their Carbon-13 Nuclear Magnetic Resonance Spectra", <i>J. Org. Chem.</i> <b>43</b> (20):3810-3813 (1978).
	Sasaki, T., et al., "Photolytic Generation of Anti-Bredt Imines from 1-Azidobicyclo[2.2.2]octane, 1-Azidobicyclo[3.3.1]nonane, and 3-Azidonoradamantane", <i>J. Org. Chem.</i> <b>48</b> (22):4067-4072 (1983).
	Sasaki et al., "Synthesis of Adamantane Derivatives. II. Preparation of Some Derivatives from Adamantylacetic Acid", <i>Bulletin of the Chemical Society of Japan</i> <b>41</b> (1):238-240 (1968).
	Sasaki et al., "Substitution Reaction of 1-Bromoadamantane in Dimethyl Sulfoxide: Simple Synthesis of 1-Azidoadamantane", <i>Journal of the American Chemical Society</i> <b>92</b> :24 (1970).



Substitute for forms 1449A/PTO & 1449B/PTO	ATTORNEY'S DKT NO. 005950-834	APPLICATION NO. 10/621,956
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	Sasaki et al, "Synthesis of Adamantane Derivatives. 39. Synthesis and Acidolysis of 2-Azidoadamantanes. A Facile Route to 4-Azahomoadamant-4-enes", <i>Heterocycles</i> 7(1):315-320 (1977).		
	Sasaki et al, "Synthesis of Adamantane Derivatives. 47. Photochemical Synthesis of 4-Azahomoadamant-4-enes and Further Studies on Their Reactivity in Some Cycloadditions", <i>Journal of Organometallic Chemistry</i> 44(21):3711-3712 (1979).		
	Sasaki, T., et al., "Synthesis of Adamantane Derivatives. XII. The Schmidt Reaction of Adamantane-2-one", <i>J. Org. Chem.</i> 35(12):4109 (1970).		
	Scherz, P., "Semiconductors: Chapter 4", pp 123-190, from <i>Practical Electronics for Inventors</i> , McGraw-Hill (2000).		
	Scherz, P., "Optoelectronics: Chapter 5", pp 191-212, from <i>Practical Electronics for Inventors</i> , McGraw-Hill (2000).		
	Service, R.F., "Can Chemists Assemble a Future for Molecular Electronics?", <i>Science</i> 295:2398-2399 (2002).		
	Stetter, et al., "Zur Kenntnis der Adamantan-carbonsaure-(1)", <i>Über Verbindungen mit Urotropin-Struktur</i> , XVII, pp. 1161-1166 (1960).		
	Stetter, et al., "Ein Beitrag zur Frage der Reaktivität von Brückenkopf-Carboniumionen", <i>Über Verbindungen mit Urotropin-Struktur XXVI</i> , <i>Chem. Ber.</i> 96:550-555 (1963).		
	Stetter, et al., "Neue Möglichkeiten der Direktsubstitution am Adamantan", <i>Über Verbindungen mit Urotropin-Struktur, XLII</i> , <i>Chem. Ber.</i> 102(10):3357-3363 (1969).		
	Stetter et al., "Über Adamantan-phosphonsaure-(1)-dichlorid", <i>Über Verbindungen mit Urotropin-Strukture XLIV</i> , <i>Chem. Ber.</i> 102(10):3364-3366 (1969).		
	Stetter, et al., "Herstellung von Derivaten des 1-Phenyl-adamantans", <i>Über Verbindungen mit Urotropin-Strukture, XXXI</i> , <i>Chem. Ber.</i> 97(12):3488-3492 (1964).		
	Stetter, H., et al., "Ringschlußreaktionen ausgehend von Bicyclo[3.3.1]nonandion-(3.7) <i>Über Verbindungen mit Urotropin-Strukture, XXX</i> 3480-3487 (1964).		
	Suginome, H., et al., "The Replacement of the Carbonyl Group of Adamantanone by an Oxygen or sulfur Atom and the One-step Transformation of 2-Methyladamantan-2-ol into 2-Oxa-adamantane; An Efficient New Synthesis of 2-Oxa- and 2-Thiaadamantane", <i>Synthesis</i> 741-743 (1986).		
	Suginome et al, "Photoinduced Transformations. 73. Transformations of Five-(and Six-) Membered Cyclic Alcohols into Five-(and Six-) Membered Cyclic Ethers-A New Method of a Two-Step Transformation of Hydroxy Steroids into Oxasteroids", <i>Journal of Organometallic Chemistry</i> 49:3753-3762 (1984).		
	Udding et al, "A Ring-opening Reaction of and Some Cyclisations to the Adamantane System. A Quasi-favorsky Reaction of a $\beta$ -bromoketone", <i>Tetrahedron Letters</i> 55:5719-5722 (1968).		
	Verhoeven, J.W., "From Close contact to Long-Range Intramolecular Electron Transfer", <i>Intramolecular Electron Transfer</i> , John Wiley and Sons, pp 603-644 (1999).		
	von H.U. Daeniker, "206. 1-Hydrazinoadamantan", <i>Helvetica Chimica Acta</i> 50:2008-2010 (1967).		
	Yang, X. et al., "The Synthesis and Structural Characterization fo Carborane Oligomers Connected by Carbon-Carbon and Carbon-Boron Bonds Between Icosahedra", <i>Inorganica Chimica Acta</i> 240:371-378 (1995).		
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